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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,440	12/14/2001	Douglas J. Bradley	10541-780	6308

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EXAMINER

BINDA, GREGORY JOHN

ART UNIT	PAPER NUMBER
3679	7

DATE MAILED: 04/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No. <b>10/017,440</b>	Applicant(s) <b>Bradley et al</b>
Examiner <b>Greg Binda</b>	Art Unit <b>3679</b>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1)  Responsive to communication(s) filed on Mar 17, 2003

2a)  This action is FINAL.      2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

4)  Claim(s) 1-20 is/are pending in the application.

4a) Of the above, claim(s) 6-20 is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-5 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on Dec 14, 2001 is/are a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some\* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

1)  Notice of References Cited (PTO-892)      4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)      5)  Notice of Informal Patent Application (PTO-152)

3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2, 4      6)  Other: \_\_\_\_\_

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*Election/Restriction*

1. Applicant's election with traverse of Group I, a composite drive shaft in Paper No. 6 is acknowledged. The traversal is on the ground(s) that the unelected invention may be efficiently searched with the elected invention. This is not found persuasive because the search for the elected invention would have to be expanded so as to include the search for the unelected invention. Such an expansion would place undue burden on the examiner.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 6-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 6.

*Information Disclosure Statement (IDS)*

3. The IDS filed Feb 24, 2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. The Form PTO-1449 attached to the IDS indicates that two international search reports were included with the IDS, but no copies of these reports have been received. (Two copies of foreign search reports were received, but they were not listed on the Form PTO-1449, nor is it clear that these reports are publications or are simply *ex parte* communications.)

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4. The IDS filed Mar 14, 2002 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. No copies of U.S. Patent Nos. 5,937,496 and 4,930,204 were provided.

5. The IDS filed Mar 14, 2002, cites Application No. 10/017,418, but the file folder for that application was not available at the time this Office action was prepared. Examiner consideration of this reference will be attempted when next the instant application comes up for further examination.

*Drawings*

6. The drawings are objected to as failing to comply with:

- 37 CFR 1.83(a) because the drawings fail to show the limitations of claim 5.
- 37 CFR 1.84(h)(3) because in Figs. 3-5 & 7, an incorrect cross hatching pattern is used for composite shafts 14 & 30 as well as composite fibrous layers 34 & 36. See MPEP § 608.02 for the correct pattern.

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7. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

*Specification*

8. The specification is objected to as failing to comply with 37 CFR 1.71 and 1.75(d)(1) because the detailed description fails to provide proper antecedent basis for the limitation, “features perpendicular to the axis of said cylindrical shaft body” in claim 1.

*Abstract*

9. The abstract of the disclosure is objected to because it begins with a phrase that can be implied. See MPEP § 608.01(b).

*Claim Objections*

10. Claims 3 & 5 are objected to because in line 2 of each claim the word “consisting” should be inserted after the word “group”. Also in claim 5, line last, the conjunction “and” should be used in place of “or”. See MPEP § 2173.05(h).

*Claim Rejections - 35 U.S.C. § 112*

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11. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5, line 2 recites “one” begging the question - one what?

*Claim Rejections - 35 U.S.C. § 102*

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Policelli, US 4,649,960. Figs. 13 & 14 show a composite drive shaft 214 comprising: a cylindrical shaft body (see uppermost layer 222 in Fig. 14); a plurality of metal pins 216 perpendicular to the axis of the cylindrical shaft body 214 including a head portion (see in Fig. 14 the lower portion of pin 216) and an anchor piece (see in Fig. 14 the upper portion of pin 216); and composite fibrous material (see the layers 222 below the uppermost layer 222 in Fig. 14) extending around the shaft body and the pins 216.

14. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Yates et al, US 4,185,472. Figs. 1, 4 & 8 show a composite drive shaft 10 comprising: a cylindrical shaft body

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12; a plurality of metal pins 50 perpendicular to the axis of the cylindrical shaft body 12 including a head portion (indicated by numeral 50 in Fig. 4) and a ring-shaped anchor piece 52; and composite fibrous material 40 extending around the shaft body and the pins.

15. Claims 1, 3 & 4 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 046 869. According to applicant's explanation of relevance (see the UK search report dtd Dec 20, 2002 included in the IDS filed Feb 24, 2003) EP 0 046 869 shows or suggest all the limitations of the claims.

16. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by any one of Puck, US 4,362,521; Auberon et al, US 5,288,109; JP-9178091 and JP-63166522.

*Claim Rejections - 35 U.S.C. § 103*

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Policelli in view of Stevens, US 1,576,874. Policelli shows anchor piece 216, but does not show the anchor piece

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with a hook, fin, screw thread or knurled edges. Stevens teaches on page 1, lines 25-32 & 71-87 making an anchor piece with fins 10 or hooks 17 in order to provide a very firm, permanent joint. It would have been obvious to one of ordinary skill in the art to modify the composite drive shaft of Policelli by making the anchor piece with a fin or a hook in order to provide a very firm, permanent joint as taught by Stevens.

19. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over any one of the references cited in items 14-16 in view of Stevens for the same reason note in item 18 above.

*Conclusion*

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sherry shows in Fig. 6 an anchor piece with fins 34 and in Fig. 9 an anchor piece with knurled edges 54. In col. 2, lines 45-47, Schaefer discloses that anchor piece shaped as a hook is an art recognized equivalent of an anchor piece shaped as a stud.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached Monday through Thursday from 9:30 am to 7:00 pm. The examiner can also be reached on alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne, can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 (before final), (703) 872-9327 (after final) and (703) 872-9325 (customer service).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



**GREGORY J. BINDA**  
**PRIMARY EXAMINER**